

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (previously presented) A method of diagnosing Crohn's disease in a subject, comprising determining the presence or absence of IgA anti-outer membrane protein C (anti-OmpC) antibodies in said subject, where the presence of said IgA anti-OmpC antibodies indicates that said subject has Crohn's disease.

2. (previously amended) A method of diagnosing Crohn's disease in a subject, comprising the steps of:

(a) obtaining a sample from a subject suspected of having inflammatory bowel disease;
(b) contacting the sample with an OmpC antigen, or reactive fragment thereof, under conditions suitable to form a complex of the OmpC antigen, or reactive fragment thereof, and IgA anti-OmpC antibody;

(c) contacting said complex with a labeled anti-IgA antibody to form a labeled complex;
and

(d) detecting the presence or absence of said labeled complex, thereby determining the presence or absence of IgA anti-OmpC antibodies,

where the presence of said IgA anti-OmpC antibodies in said subject indicates that said subject has Crohn's disease.

3. (previously amended) A method of diagnosing Crohn's disease in a subject, comprising the steps of:

(a) contacting a sample from a subject suspected of having inflammatory bowel disease with an OmpC antigen, or reactive fragment thereof, under conditions suitable to form a complex of the OmpC antigen, or reactive fragment thereof, and IgA anti-OmpC antibody, wherein said OmpC antigen comprises the amino acid sequence of SEQ ID NO:1;

(b) contacting said complex with a labeled anti-IgA antibody to form a labeled complex;
and

(c) detecting the presence or absence of said labeled complex, thereby determining the presence or absence of IgA anti-OmpC antibodies,

where the presence of said IgA anti-OmpC antibodies in said subject indicates that said subject has Crohn's disease.

4. (original) The method of claim 2, wherein IgA anti-OmpC antibodies are detected with an enzyme-linked immunosorbent assay.

5. (original) The method of claim 2, further comprising determining the presence or absence of IgA anti-Saccharomyces cerevisiae antibodies (ASCA) in said subject, wherein the presence of IgA anti-OmpC antibodies or the presence of IgA ASCA in said subject each independently indicates that said subject has Crohn's disease.

6. (original) The method of claim 5, wherein the presence of IgA ASCA is determined by reactivity with purified yeast cell wall phosphopeptidomannan (PPM).

7. (original) The method of claim 6, wherein said yeast cell wall PPM is prepared from ATCC strain #38926.

8. (withdrawn) The method of claim 2, further comprising determining the presence or absence of IgA anti-I-2 polypeptide antibodies in said subject, wherein the presence of IgA anti-OmpC antibodies or the presence of IgA anti-I-2 polypeptide antibodies in said subject each independently indicates that said subject has Crohn's disease.

9. (withdrawn) The method of claim 8, wherein the presence of IgA anti-I-2 polypeptide antibodies is determined by IgA reactivity with an I-2 polypeptide having substantially the amino acid sequence of SEQ ID NO: 3.

10. (withdrawn) A method of diagnosing Crohn's disease in a subject, comprising the steps of:

- (a) determining the presence or absence of IgA anti-OmpC antibodies in said subject;
- (b) determining the presence or absence of IgA ASCA in said subject;
- (c) determining the presence or absence of IgA anti-I-2 polypeptide antibodies in said subject,

where the presence of said IgA anti-OmpC antibodies, the presence of IgA ASCA or the presence of IgA anti-I-2 polypeptide antibodies each independently indicates that said subject has Crohn' s disease.

11. (withdrawn) The method of claim 10, further comprising determining the presence or absence of perinuclear anti-neutrophil antibodies (pANCA) in said subject.